

FAA APPROVED METHODS FOR FOD REMOVAL IN ONE UNIT:



VACUUM AND BRUSH REMOVAL OF DEBRIS



HIGH VELOCITY BLAST AIR TO PUSH MATERIAL OFF SURFACE



POWERFUL MAGNET TO COLLECT FERROUS MATERIAL



GLYCOL RECOVERY FOR PICKING UP DE-ICING FLUID



1(800)892-7831 • Fax (509)533-1050

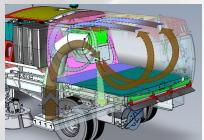
Serving Washington, Idaho, Montana, Oregon

Sweeping is one of the Best Management Practices to reduce FOD from runways and tarmac areas, and nothing does this as quick and efficient as the Schwarze A7 Zephyr™ high speed runway sweeper. Designed to meet the rigorous demand standards of the Department of Defense high speed sweeping requirements for quickly and effectively removing FOD.



FOD or foreign object debris can wreak havoc on aircraft and has been shown to cost the industry more than \$10 Billion in damage, delays and disgruntled customers. Sweeping has been shown to be one of the best management practices to reduce FOD from runways and tarmac areas and nothing does this better than the Schwarze Model A7 Zephyr™ high speed runway sweeper. The A7 Zephyr™ was designed to meet the rigorous demand standards of the Department of Defense high speed sweeping requirements for quickly and effectively removing FOD.

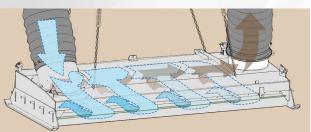
Schwarze regenerative air technology makes use of both positive pressure and vacuum airflow, this maintains the compressed air in a sealed loop and is not returned to the atmosphere like traditional vacuum sweepers.



Regenerative Air Technology

Regenerative air sweepers generally only need 100KW to do the same amount of work as pure vacuum sweepers with 200KW.

The blast and recovery cycle continues indefinitely with no air leakage.



Pressurized air is forced across an "air knife" approximately 2.5 meters wide across the sweeping head. This scrapes the runway surface with a sheet of pressurized air, lifting dirt and Foreign Object Debris off the runway surface.

The performance of the Schwarze A7 Zephyr[™] meets FAA guidelines for removing FOD such as ball bearings, rivets, and other metals at vehicles speeds of 25 KPH (TOS = 15 MPH).



The A7 Zephyr[™] delivers outstanding results by:

- Removing FOD hazards (foreign object debris)
- Collecting large quantities of water from runways
- Collecting ferrous materials
- Collecting de-icer (Glycol)
- Removing dirt, grass & leaves with side blast air



A7 Zephyr™ Regenerative Air Runway Sweeper



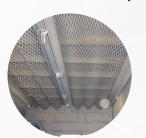






40" Dump Height

Large Fluid Capacity Glycol Collection System with 250 GPM Pump Off System





Large Saw-Tooth Increased Hopper Screen Design





44" Recessed Gutter Brooms with Shielded Broom Motor

Backup Camera

Up to 144" Sweep Width

Powerful 360 Degree Rotating High Velocity Side Blast Air **Blower**





CAN-Bus Control Panel with Backlit Switches, Text and Icons



Heavy Duty Catch Basin Vacuum Hose with Hand Controls

Rolt-On Tubes

Schwarze regenerative air airport sweepers are used at the world's leading international airports, military air bases, and small regional airports because they offer the perfect combination of exceptional value, superior performance, and flexibility.



"Mobile Regional Airport, AL has been using the A7 Zephyr for 5 years and when Airbus sends out their FOD checkers, they tell us the runways look really good. We use it to clean the rams, runways, terminals. aircraft gates, lead-in lines and J-lines. We just stick with Schwarze because they are great machines and very reliable."









For More Information Visit WWW.SCHWARZE.COM/AIRPORT-SWEEPING/

CERTIFIED





*Ask us about our optional:







*TYPICAL MEASUREMENTS SHOWN . EXACT DIMENSIONS DEPENDING ON OPTIONS AND TRUCK MANUFACTURER

SWEEPING PATH

Pickup head only Pickup head and

one gutter broom

Pickup head and

two gutter brooms

117 in (2972 mm)

90 in (2286 mm)

144 in (3658 mm)

CHASSIS

Mounts on various chassis to meet requirements

SWEEPER BODY

Construction Safety props

Welded 10-gauge stainless steel plate Lift spacers

AUXILIARY ENGINE

Model/type Aspiration

4045T in-line 4 cylinder Tier 4 Final turbo-charged diesel John Deere

Manufacturer Displacement 275 cu. ln. (4.5 L) Brake horsepower 134 hp (100 kw) @ 2400 rpm Torque

398 ft lb (540 Nm) @1500 rpm

Centrifugal pre cleaner; Air cleaner

dry type with safety element and restriction

indicator

Oil filter Full-flow/spin-on Stroke 5 in (127 mm) Bore 4.20 in (106 mm)

Compression ratio 19 to 1

Safety shutdown Three-point automatic

Throttle control Electronic

HYDRAULIC SYSTEM Dual output 2 section

Type Pump capacity

(30 lpm) per section for 16 gpm total Direct gear Maximum pressure 2750 psi (190 bar) 25 gal (94 L) 10 micron; spin on Pressure relief valve Electro-hydraulic

8 gpm @ 1800 rpm

AUXILIARY HYDRAULIC SYSTEM

Type

Drive

Filter

Reservoir

Protection

Controls

Gear type; driven by electric motor **Function** Lower hopper; open/close hopper door;

raise brooms and pickup head

DUST CONTROL SYSTEM

High pressure/low Type volume

Capacity Tank construction

Fill diameter Fill hose Controls Nozzles

2.5 in (63.5 mm) 25 ft (7620 mm) Electric; in-cab 2 on each broom: 5 around suction head; 2 inside suction nozzle; 2 on front axle: 2 inside hopper In-cab

250 gallon (946 L)

Polyethylene filter; 50 mesh; cleanable

Water level gauge

FAN SYSTEM

Type Drive

Construction Balance Diameter Housing lining Mounting

Hardox steel 1.5 grams on 2 sides 32.75 in (832 mm) Bolt-in corded rubber 2 regreasable sealed bearings

Closed-face radial

Direct via 5 groove;

banded power belt

Vacuum enhancer For heavy/light material; in-cab indicator

PICKUP HEAD

Type

Mechani-Pneumatic, dual chambered full-width blast orifice with windrow angle Operating direction Forward and reverse Adjustable spring

balanced

90 in (2286 mm)

Suspension Length

Pressure hose diameter Suction hose diameter

Hose construction

Head area

Controls Skids

Construction

14 in (355.6 mm) 14 in (355.6 mm) 3/8" (9.5 mm) wire-reinforced molded rubber 3240 sq in (20903 sq cm) Hydraulic raise and lower Double wide tungsten carbide

Abrasion-resistant steel inlet and outlet transitions.

SIDE BROOMS

Diameter

Type Vertical steel digger Location Right; left; forward of

pickup head 44 in [1118 mm]

Drive Hydraulic Suspension Torque-sensing spring

Wear adjustment Automatic Pressure Manual

Speed Variable; non-reversing 5 each side: disposable Seaments

Tilt angle adjustment In-cab controls

INSTRUMENTATION

Auxiliary engine

Flat panel full color display; tachometer; hourmeter; voltmeter; temperature gauge; oil pressure gauge; warning icons

DEBRIS HOPPER

8.4 cu yd (6.4 cu m) Volumetric capacity Usable Capacity 7.0 cu vd (5.4 cu m) 51 degrees Dump angle Floor angle 3 degrees

Lifting Twin hydraulic cylinders Hopper dump door Hydraulic open, close, lock Inspection doors 1 on each side,

pressure vessel lock Hopper dump height 40 in (1016 mm) Debris screens Sawtooth drop down

ELECTRICAL SYSTEM

Voltage 12 V

Sweeper engine

alternator 90 amp

PAINT

One coat of sealer/primer and two coats of in standard white color.

Paint White: Sherwin Williams

Genesis G2 #100268977

OPTIONAL SWEEPER EQUIPMENT

Special Paint

Front Mounted Magnet Bar

Amber Beacon Strobe Light Kit Arrowboard Kit Additional Flood Lights Hopper Hand Hose Remote Drop Down Screens

Hopper Dump Assist Shaker 12-volt Auxiliary Hydraulic System **Dual Steeling and Controls**

Extra Water

High Pressure Front Spraybar High Pressure Wash Dow Side Air Blast Head Hopper Deluge Head Drain **Dual Outside Hopper Controls**

Lifetime Hopper Warranty Short Wheelbase Chassis

Note: Design and specifications subject to change without notice.





